

Minutes of the Imperial Valley/Mexicali Air Quality Taskforce Meeting

UABC, Mexicali Campus

January 11th, 2007, Mexicali, Baja California

Co-Chairs: Brad Poiriez and Daniel Delgadillo.

Attendance:

Brad Poiriez, Assistant APCO (Air Pollution Control Officer), Imperial County Air Pollution Control District; **Daniel Delgadillo**, Baja California Secretariat of Environmental Protection; **Dave Fege**, U.S. Environmental Protection Agency, San Diego Office; **Marco Antonio Reyna**, UABC Mexicali Institute of Engineering; **Efrain Nieblas**, UABC Mexicali Institute of Engineering; **Margarito Quintero**, UABC Mexicali Institute of Engineering; **Moises Rodriguez Lomeli**, Epidemiologist, Mexicali General Hospital; **Omar Bonorrojo**, Inspection Officer, PROFEPA Baja California; **Jesus Jimenez Payan**, subdelegado PROFEPA; **Dimitri Smith**, California Air Resources Board; **Israel Flores**, Baja California Secretariat of Environmental Protection; **Jonathan Chapman**, Air Quality Specialist, Torres Martinez Tribe; **Nina Hapner**, Executive Director, Border Liaison for the California Border Tribes, Native American Environmental Protection Coalition; **Rich Ryan**, Public Administration, SDSU Imperial Valley campus.

Commitments

- ❖ **Daniel Delgadillo** will find out status of Silicon Border project with Baja California Secretariat of Economic Development and inform the group.
- ❖ **Jesus Jimenez Payan** will prepare a PowerPoint presentation showing a video of air pollution in Mexicali to be shown to city and state officials.
- ❖ **Brad Poiriez** will ask his Inter-government Relations person about any new information on the Silicon Border project, and will also try to contact the individual who was promoting the project in the beginning, and inform the group at the next meeting.
- ❖ **Nina Hapner** reminded Brad Poiriez to include a line item in the future for updates from the Tribes.

I. Welcome and Opening Remarks

Brad Poiriez welcomed everyone and shared his appreciation to Taskforce members from Mexico who must endure the long border-crossing wait times in order to attend. He shared that he and the Board of Supervisors is committed to participating in finding solutions to mitigate it, such as extended hours of operation and an additional border crossing, adding that it would not only be a political benefit, but also an environmental one, since it would reduce the time that vehicles sit at idle while waiting to cross. He also mentioned that a section would be added to the Updates agenda item for the tribes to share their insight, etc.

II. Self-Introductions

III. Review of Minutes from Last Meeting

Brad Poiriez asked all members in attendance whether they had reviewed the Minutes, and for anyone who wished to make changes to express so at this time. As there were no requests for changes made, the Minutes were considered finalized.

IV. Presentations

Baja California Air Quality Monitoring Network. Israel Flores, Baja California Secretariat of Environmental Protection.

He opened his presentation by sharing that the Air Quality Monitoring Network was born in 1995, through an EPA initiative to set up monitoring stations south of the border to find out what air quality was like. The State of California has continued operating the network until now with federal funding. This year, an agreement was signed by EPA and the Baja California State Government to transfer the network's operation and maintenance to the State of Baja California.

There are a total of 13 monitoring stations, of which 9 report the monitoring automatically. There are 2 particulate monitoring stations in Tijuana without automatic reporting. The other 3 have continuous air quality analyzers, and particulate and dust measuring equipment without automatic reporting.

Mexicali has 3 stations with automatic reporting to the webpage that provide real time (1-hour delay) information. It also has the Campestre station, which does not upload to the webpage yet, and two additional stations (Progreso and CONALEP) with manual particulate monitoring.

To preserve reporting quality, the equipment self-calibrates daily at 3:00 a.m. Additionally, manual calibrations are performed every 2 weeks.

EPA also performs a mandated annual audit of all equipment. The results from last October's audit are not available yet. Even after the transfer, EPA will continue supporting Baja California with the annual audits. Funding has been approved for the Monitoring Network and the agreement with EPA is on the verge of being signed for a 3-year transfer of the network. The Baja California State Government will be responsible for network maintenance and operation, but the State of California will continue managing the data. Next year, the State of Baja California will hire and train personnel to ensure that data is managed up to U.S. EPA standards.

There is an Air Quality webpage, at <http://aire.bajacalifornia.gob.mx>, which is available to the public. He presented in detail how this webpage works, including interactive maps, and explained that it also allows for historical data look-up.

Marco Antonio Reyna mentioned that he had tried to get per-hour average information from the site, but was unable to find it. He asked if there was a way he could get this data.

Israel Flores replied that they did not have full access to the data yet, but that he could ask the State of California for it. **Marco Antonio Reyna** responded that this was in fact what he had done, with **Dave Fege**'s support.

Dave Fege mentioned that caution must be used when using the data on the webpage for research purposes, since it is raw data and might include equipment errors, etc. He

added that EPA's AQS System contains much better data, since it has undergone QA and QC processes, but is only available to researchers and government agencies.

Israel Flores added that all the data collected by the Monitoring Network is validated through a quality assurance process, and then fed into EPA's AQS System. The whole process takes between 3-5 months.

Moises Rodriguez posed 3 questions. The first was that if there are currently 13 monitoring stations in Baja California, how many would be needed to have a clearer, more complete idea of air quality, particularly for Mexicali. Second, in addition to assuming responsibility for the data, what else is gained by transferring the EPA monitoring stations to the Baja California State Government? And third, he asked if it would not be a higher priority to invest in additional monitoring units instead of in managing existing ones.

In regards to the number and location of the monitoring stations, **Israel Flores** informed him that there had not been studies made to site the stations in each of the cities, but were instead sited where they were able to do so.

He mentioned that work is currently being done to redesign the network through a study of the emissions inventory being prepared for Tijuana and Rosarito.

As to the benefits of the transfer, it will allow better access to information, which will result in a broader vision of existing conditions in Baja California. This in turn will enable them to identify trends and establish policies that could turn negative trends around.

Brad Poiriez shared that in the U.S. there is no established criteria as to how many air monitoring stations a particular air basin has to have. There are, however, in-depth siting protocols that take into account population size and density to decide the number and location of monitoring stations.

Imperial County Air Quality Monitoring Network. Dimitri Smith, California Air Resources Board.

He started by presenting a map of Imperial County including its geography and populations in its major urban areas and those in Baja California.

He stated that Imperial County has been monitoring air quality for over 30 years, with 7 monitoring stations currently in operation throughout the county, primarily in urban areas (except Holtville). They check for ozone, CO, nitrogen dioxide, sulfur dioxide, PM, and toxics.

As a historical overview, he shared that in 1971 they started monitoring for total suspended particulates and lead in Calexico. In 1986 they started monitoring for PM10 in Brawley and El Centro, and for ozone in El Centro. In 1994 they started monitoring for CO, nitrogen dioxide, and sulfur dioxide in Calexico. Finally, in 1999, they started monitoring for PM2.5 in Brawley, Calexico, and El Centro.

The pollutants currently being monitored in Imperial County are:

Brawley – PM2.5, PM10

Calexico (East) – Ozone, CO, Nitrogen dioxide

Calexico (Ethel St.) – Ozone, PM2.5, PM10, CO, nitrogen dioxide, sulfur dioxide, lead, and toxics.

Calexico (Grant) – Ozone, PM10

El Centro – Ozone, PM2.5, PM10, CO, nitrogen dioxide

Nyland – Ozone, PM10

Westmoreland – Ozone, PM10

He shared a slide comparing U.S. and Mexico air quality standards, to show how similar they are to each other.

He indicated that Imperial County currently exceeds 1-hr and 8-hr ozone standards, the 24-hr PM10 standard, and the new PM2.5 standard. They are in unclassified attainment for CO, which means that at the time of designation there was not enough information to make the determination as being in attainment. They are, however, in compliance with the National Ambient Air Quality Standards for CO.

Calexico (Ethel St.) is one of only 15-20 stations in the state of California that measures toxics. He shared that Calexico is above state Standards for benzene and 1,3-butadiene, two substances that pose public health risks and are also associated with mobile sources, such as incomplete exhaust. He added that levels in Calexico are one of the highest in the state, and are even higher than some Los Angeles urban areas, such as Burbank.

One of the primary sources of pollution is motor vehicles, which contribute ozone precursors, CO, PM2.5, and toxics. Stationary sources also contribute to ozone precursors, PM2.5, and toxics. Unpaved roads and wind-blown emissions are one of the primary contributors to particulate pollution.

Another benefit of monitoring stations is that they provide Air quality Index information to the public, as well as information on individual stations, health information, and air quality advisories.

Dave Fege added that an additional benefit of the Imperial County website is that you can register to get an email with air quality advisories.

Brad Poiriez added that people can also get pager notifications.

V. Border 2012 Project Updates, Dave Fege.

There is a Brick Kiln pilot project to help Baja California brick manufacturing operations be more environmentally friendly.

There is also the Baja California Air Monitoring Network project, already mentioned by Israel Flores.

The truck parking lot study project has been funded and is about to begin implementation. This project will yield BACMs (Best Available Control Measures) for heavy-duty diesel trucks that use parking lots as staging areas, especially in Calexico.

Richard Ryan asked if the study was for modeling the idling trucks, and if there would be a second, implementation phase through which rules would be implemented.

Brad Poiriez stated that the project was more complex and actually had three phases. The first phase would be to identify the parking yards, including which are operating under permits and which are not registered (parcels of land where people are parking trucks). The second phase will be the vehicle counts and modeling of diesel and PM emissions. The results would be used to analyze whether additional rules and regulations are needed.

Dave Fege mentioned that another project about to enter the implementation phase was for retrofitting approximately 20 heavy-duty diesel trucks that routinely cross the border in the Mexicali/Calexico area. These trucks would be retrofitted with diesel oxidation catalysts.

One final project he mentioned was an update of the Mexicali Emissions Inventory being done by EPA, the, and SEMARNAT. It would include pollution from vehicles, trucks, buses, stationary sources, unpaved roads, etc.

In closing, he shared that there was a California/Baja California Regional Workgroup Co-Chair Meeting in December. The co-chairs included high-ranking officials from the Baja California Secretariat of Environmental Protection, SEMARNAT, EPA Region IX, and the Secretary of Cal/EPA. The group met with the Taskforce co-chairs to look at projects to be funded for next year. Three air quality projects were mentioned for the California/Baja California region: an expansion of the Brick Kiln project to add another 4-6 brick kilns; an update of the Tijuana/Rosarito/Tecate Emissions Inventory; and a project to characterize and estimate the amount of emissions coming from idling trucks at the Otay border crossing.

He encouraged everyone to analyze at each of this Taskforce's meetings how they can take what they are learning in the meeting and translate it into a high-priority project that would help us solve a problem or learn more about air pollution.

Brad Poiriez seconded **Dave Fege's** comment, and added that perhaps one such project could be related to the Cerro Prieto geothermal plant. One of the emissions normally associated with geothermal power plants is benzene, which is a known carcinogen. One alternative being used in geothermals as a Best Available Control technology is regenerative thermal oxidizers, which incinerates emissions with an approximately 95% destruction rate.

Referring back to the comment made regarding the siting of monitoring stations, he indicated that perhaps it would be worthwhile to have a toxics monitoring station nearby, maybe in one of the *Ejid*os. This information could then be used to implement requirements for the geothermal plant.

Margarito Quintero shared, in response to Brad's comment, that none of the research at Cerro Prieto has indicated the presence of benzene. There has been hydrosulphuric acid, carbon dioxide, ammonia, noble gases, but never benzene.

No studies have ever been made in Mexicali to correlate air emissions at Cerro Prieto with the onset of illnesses in the surrounding community.

Jesus Jimenez Payan said they have no data on benzene; however, at Cerro Prieto the water table is being polluted by brine containing arsenic, barium, lithium, and sodium.

He expressed that it would be interesting to do benzene monitoring in the area around Cerro Prieto, because it is extremely necessary to quantify it and come up with the legal elements needed to submit an initiative. This Taskforce could draft a proposal to the Baja California legislature based on the results of this study, adding that, as we all know, leukemia and asthma cases are on the rise.

Marco Antonio Reyna stated that the monitors in Imperial County and Mexicali cannot be used for epidemiological research. The technology exists, he said, to do the personal monitoring needed to correlate pollution to illnesses, but they do not have an ad-hoc laboratory.

His proposal is to properly equip a lab that can do these types of research studies. UABC has the physical space for such a lab, but funding would be needed for equipping the lab.

Dave Fege stated that funding at EPA is really scarce, not only for border activities, but in general. Therefore, they should come up with a list of 2-3 high-priority projects as a group, focused on the Border 2012 objectives for air quality.

Brad Poiriez added that ideas for projects do not necessarily have to be limited to the 4 or 5 Taskforce meetings during the year. If anyone comes up with an idea away from these meetings, they can let **Emmanuel Sanchez** or himself know, so they can inform the rest of the group at the next meeting.

Margarito Quintero shared, in regards to **Dave Fege's** comment on the emissions inventories, that UABC is going to start a doctorate project to assess PM2.5 and PM10 emission factors in Mexicali. He asked whether they could request funding for this project if it were approved by the Faculty of Engineering Postgraduate studies department.

Dave Fege replied that it is a possibility, but to keep in mind the funding cycle. He also suggested discussing this project with the Mexican authorities working on the emissions inventory to see if this was something they would be interested in.

Israel Flores informed the group that they had received a report from the Border Environmental Program, and asked if more copies could be obtained and distributed to taskforce members at the next meeting so they could all be aware of the results reached by different groups along the border.

He mentioned that Daniel Chacon from BECC had indicated that Mexican agencies could now request funding directly from BECC, and asked **Dave Fege** if he could tell them more about this.

Dave Fege said that his understanding was that BECC could now request EPA funds and transfer them to Mexican organizations, such as NGOs, but that it was difficult to transfer them to the state of Baja California.

VI. Updates from federal, state, and local governments.

Brad Poiriez shared that in Imperial County there are two Draft Environmental Impact Report (EIR) documents for ethanol facilities. The one that is the furthest along in the process is Pacific Ethanol, a 60-million gallon/year facility currently in the Public Comment Period, which will end on January 27th, 2007. The second is Cillian, a 110-million gallon/year facility. Both of these would be corn-based ethanol facilities. A third proposed facility is Imperial County Bio-Refining, a 30-million gallon/year sugar-cane-based facility.

There is also a proposed bio-solid facility called Liberty XX. It would truck in human waste and transform it into power. There is strong opposition from the community to this project.

Hay baling operations in Imperial County are being given Emission Reduction Credits for changing their combustion engines for electric ones. A Certificate of Destruction of the engine blocks is required to ensure that they are not merely sold to another operation when they change them for electric engines.

ICAPCD is currently looking to expand its staff. They need a planner, an additional inspector, and an additional engineer.

Daniel Delgadillo shared that they are planning a restructuring of the Baja California Secretariat of Environmental Protection. They are also undertaking pollution prevention training courses and training for micro-businesses. They also have a Pollution Prevention Award project, and a micro-business self-regulation program.

Margarito Quintero asked for information on the status of the Silicon Border project.

Daniel Delgadillo said that they do not have new information on the Silicon Border project, but that he would find out its status with the Baja California Secretariat of Economic Development and inform the group.

Brad Poiriez mentioned that they had an Inter-Government Relations person, and said he would contact him to find out if there was any new information. He also recalled having the name of the individual who was promoting the project in the beginning, and said he would try to contact him as well and inform the group at the next meeting.

Nina Hapner reminded Brad Poiriez to include a line item in the future for updates from the Tribes. She then shared that the San Diego/Tijuana Air Quality Taskforce now has a Tribal co-chair, Paula Stigler, from the Pala Band of Mission Indians. She asked that anyone who would like her contact information to let her know so she could forward the information.

She informed the group that the Tribes have been meeting with EPA regarding the new Source Review Rule. Some of the concerns of the Tribes had to do with the emission credits they would need to get from the State and from other industries for new industries or other types of businesses that produce emissions, as these could affect the economic development of the Tribes.

She stated that Los Angeles had purchased part of the Mesquite gold mine to use as a landfill.

EPA is proposing to do a 45-day review of submitted permits, but they expect that it will take EPA longer, and the 30 days the Tribes are being given to comment back to EPA is probably too short of a period of time.

In the interest of time, she asked anyone who would like more information on the NSR's, who attended the meeting, its effects on tribes and surrounding states, counties, municipalities, she will gladly give them Paula Stigler's contact information.

Brad Poiriez commented that the previous year he had been part of the early discussions with the Quechuan about a new casino to be sited along Los Algodones Road, and asked Nina Hapner if she had any new information on this project.

Nina Hapner replied that she did not have any new information at this time. She shared that the Arizona and California Tribes would be having their Border Caucus meetings on February 15th and 22nd, respectively. The California Caucus will be held in San Diego at the Red Lion.

Moises Rodriguez expressed a concern of the medical community as to who is in charge of regulating and addressing smoke emissions from coal-burning *carne asada* operations, rotisseries, etc. in Mexicali, and asked the Taskforce if they had any information about this.

Daniel Delgadillo replied that the Air Quality Taskforce addresses any and all air-quality-related issues; however, he said, concerns such as the one he shared with the

group should be brought up with the authorities – the Municipal Directorate of Ecology, in this case – which could best answer questions regarding these types of establishments.

Marco Antonio Reyna added that this issue has not only been discussed in previous taskforce meetings, but also at a conference recently organized by Rick Van Schoik, where Ned Strong from LASPAU had stated that a technical report from one of their projects had indicated it as a very significant source of air pollution in Mexicali.

Margarito Quintero shared that many people whose homes were located near these types of establishments were even considering selling because they devalued by the ashes, pests such as mice and roaches, and parking problems. In his opinion, the solution would be to not grant permits for these types of operations in residential areas. It is a serious public health problem which requires collaboration between the medical community and city government to come up with regulations to control where these establishments are allowed to operate.

Moises Rodriguez asked if it would be feasible to get funding to study this issue and submit the results to the municipal government.

Jesus Jimenez Payan mentioned that they could do very little, since there are no rules to enforce. He suggested organizing a meeting with City Council and the Municipal government to assess the situation and come up with a way of efficiently and expeditiously enforcing the law.

He added that Mexicali is also invaded by a cloud of smoke every night, probably from the landfill and brick kiln operations, and that this is something that has to be regulated.

Marco Antonio Reyna proposed inviting City Council members to a meeting to discuss what is needed in order to establish these rules.

Jesus Jimenez Payan said he would make a PowerPoint presentation showing a video of air pollution in Mexicali so they could show it to city and state officials.

Daniel Delgadillo added that they should invite Manuel Zamora from COPLADEM, who is in charge of environmental issues in Mexicali, to the next Taskforce meeting. He shared that the Mexicali government had received a budget increase and has received funding to perform more inspections. Before doing these inspections, they have to notify the companies three days in advance.

Brad Poiriez expressed that if 3-day notice is given prior to inspection, this could allow a company to become compliant for the inspection, even if it was not compliant the remaining 364 days of the year. He felt that changing this requirement should be discussed with the corresponding authorities. He added that, in the case of his agency, they could inspect any permitted facility without previous notice, and that they are obligated to grant access.

VII. Wrap-Up/Date of Next Meeting.

The next meeting was tentatively scheduled for March 8 or 15, 2007, at UABC Mexicali at the usual time.

Session Adjourned.